- SCS ENGINEERS --

PHASE II ENVIRONMENTAL
INVESTIGATION AND
SOIL MITIGATION
SLAUSON DISTRIBUTION CENTER
12500 EAST SLAUSON AVENUE
SANTA FE SPRINGS, CALIFORNIA

#### Prepared for:

Principal Capital Management, LLC 801 Grand Avenue Des Moines, IA 50392-1350 (515) 283-8847

#### Prepared by:

SCS Engineers
3711 Long Beach Boulevard, 9th Floor
Long Beach, California 90807-3315
(562) 426-9544

October 31, 2000

File No. 01200116.01

This Phase II Environmental Investigation and Soil Mitigation report for property located at 12500 East Slauson Avenue in Santa Fe Springs, California, dated October 31, 2000, was prepared and reviewed by the following:

Darren R. Ness Staff Scientist

Kevin W. Green, R.G. R.E.A

Project Manager

Tom Dong, R.E.A.

Vice President

SCS ENGINEERS

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#### LIMITATIONS/DISCLAIMER

This report has been prepared specifically for Principal Capital Management, LLC with application to a Phase II Environmental Investigation and Soil Mitigation of property located at 12500 East Slauson Avenue in Santa Fe Springs, California. This report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, expressed or implied, is made as to the professional opinions presented herein. No other party, known or unknown to SCS is intended as a beneficiary of this work product, its content or information embedded therein. Third parties use this report at their own risk.

Changes in site use and conditions may occur due to variations in rainfall, temperature, water usage, economic, or other factors. It is possible that additional information exists beyond the scope of this investigation. Additional information that was not available to the consultant at the time of this investigation or changes that may occur on the site or in the surrounding area may result in modification to the site that would impact the summary and recommendations presented herein. This report is not a legal opinion.

## PHASE II ENVIRONMENTAL INVESTIGATION AND SOIL MITIGATION SLAUSON DISTRIBUTION CENTER 12500 EAST SLAUSON AVENUE SANTA FE SPRINGS, CALIFORNIA

#### INTRODUCTION

SCS Engineers (SCS) was retained by Principal Capital Management, LLC (Principal) to conduct environmental investigation activities and mitigate diesel-impacted soils located at 12500 East Slauson Avenue in Santa Fe Springs, California (subject site – Figure 1). SCS previously prepared a Phase I environmental assessment of the subject site in June 2000. Results of the Phase I are described in the narrative below and are presented in our report, Phase I Environmental Assessment Report. 12500 E. Slauson Avenue, Santa Fe Springs, California, dated June 2000.

#### BACKGROUND

As described in the above-referenced report, one 10,000-gallon diesel aboveground storage tank (AST) with associated fuel pump and two remote dispensers were located along the southwestern portion of the subject site. Reportedly, this fueling system has not been used for 8 to 10 years. Therefore, SCS recommended the system be removed and closed in accordance with City of Santa Fe Springs Fire Department (SFSFD) requirements.

Information provided to SCS indicates removal of the AST and associated fueling system was conducted in August 2000 by Coastal Pacific Construction, Inc. of Laguna Hills, California. Upon removal, six soil samples were collected from various locations (refer to Figure 2). According to a site map provided, soil samples were collected from the following areas:

- Two soil samples collected from areas adjacent to the north and east of the former AST at
  a depth of approximately five feet below grade (samples 1A and 1B).
- Beneath a portion of the fuel supply line at a depth of approximately three feet below grade (sample 1F).
- Beneath the former fuel pump at a depth of two feet below grade (sample 1D).
- Two soil samples collected from beneath both former remote dispensers at depths of approximately two feet below grade (samples 1C and 1E).

All six soil samples were analyzed for gasoline (C4-C12) and diesel (C13-C23) range hydrocarbons by EPA Method 8015 Modified and volatile organic compounds (VOCs) by EPA Method 8260B. Results of the analyses indicated detectable concentrations of gasoline and/or

diesel range hydrocarbons in four of the six samples analyzed. Gasoline was detected in samples 1D and 1E at concentrations of 294 and 356 milligrams per kilogram [mg/kg, or parts per million (ppm)]. Diesel was detected in samples 1B, 1D, 1E, and 1F in concentrations ranging from 38 to 16,100 mg/kg.

#### Phase II Investigation Objectives

In order to verify and determine the extent of impacted soils, SCS proposed to collect soil samples at 5-foot intervals from 5 to 20 feet below ground surface (bgs) at locations where elevated concentrations of diesel hydrocarbons were detected. SCS utilized a truck-mounted direct-push Strataprobe rig and on site mobile laboratory to collect and analyze soil samples.

#### REGIONAL GEOLOGIC, HYDROGEOLOGIC AND TOPOGRAPHIC INFORMATION

The subject site is located within the northern portion of Santa Fe Springs at an approximate elevation of 150 feet above mean sea level. The area topography slopes gently to the south/southwest. The Sorensen Avenue Drain is located directly adjacent (south) of the subject site and directs runoff from this area of Santa Fe Springs to the La Canada Verde Creek located to the southeast.

Based on site investigation work previously conducted on the subject site related to former underground storage tanks (USTs), the uppermost aquifer underlying the subject site consists of sand and silty sand that is at a depth of approximately 26 to 28 feet bgs. Above this is a clay layer, which is approximately 20 feet thick.

The subject site is situated in the Central Groundwater Basin of the Los Angeles Coastal Plain. Bulletin 104, Appendix A of the California Department of Water Resources (1961) indicated that the first regional aquifer is located approximately 30 to 50 feet bgs. Based on topography, groundwater is anticipated to flow in a southerly direction.

#### PHASE II INVESTIGATION

SCS's field investigation was conducted on September 12, 2000. Soil sampling locations were placed in areas of potentially impacted soils where elevated concentrations of diesel range hydrocarbons were previously detected. These areas included:

- The former fuel pump island area.
- The former remote dispensers located both north and south of the former fuel pump.

A total of 20 soil samples were collected from six boring locations (B1 through B6) at depths ranging between 5 and 20 feet bgs. A map of the subject site showing sampling locations is provided as Figure 2.

#### Materials and Methods

Soil samples were obtained from depths between 5 and 20 feet bgs at six locations (B1-B6) using a truck-mounted direct-push Strataprobe rig provided by Transglobal Environmental Geochemistry (TEG) of Solana Beach, California. TEG collected soil samples from all six borings under the oversight of SCS personnel. TEG's direct-push Strataprobe rig is equipped with a hydraulic hammer and a two-foot long. 1.50-inch diameter split-spoon sampler. A metal tip was fixed to the head of the split-spoon sampler and driven to the desired depth on a steel rod. Soil samples were collected by retracting the drive tip through the center of the sampler with an inner rod and hydraulically hammering the sampler an additional two feet.

Soil samples collected by TEG were recovered in two-foot long, pre-cleaned 1.50-inch diameter acetate sleeves which had been placed inside the two-foot long split spoon sampler. The bottom six inches of the acetate sleeve was cut and collected for laboratory analysis. The remainder of the acetate sleeve was used for soil logging purposes using the Unified Soil Classification System. Boring logs are provided in Appendix A. As noted in the boring logs, visual and olfactory indications of impacted soil were only noted in the area of boring B4.

Immediately following soil sample collection, both ends of the cut acetate sleeve were covered with a Teflon square and capped with plastic end caps. A solvent-free label noting the date of collection, sample number, and project number was affixed to each sample. Immediately following labeling, samples were relinquished to a mobile laboratory provided by Mobile One Laboratories, Inc. (Mobile One) of Escondido, California for on site analysis. Soil samples were tracked from the point of collection through the laboratory using proper chain-of-custody protocol. Mobile One is certified by the California Department of Health Services to perform laboratory analysis.

Standard three stage decontamination procedures were used for all sampling equipment between each boring. New latex gloves were used and frequently replaced in the handling of all soil samples.

#### PHASE II ANALYTICAL RESULTS

Laboratory results, chain-of-custody documentation, and QA/QC data from soil samples are provided in Appendix B.

A total of 20 soil samples were analyzed within the mobile laboratory provided by Mobile One. Soil samples were analyzed for petroleum hydrocarbons as diesel (C13-C24) and volatile aromatic hydrocarbons [benzene, toluene, ethylbenzene, and xylenes (BTEX)] using EPA Methods 8015 Modified and 8020, respectively. EPA Method 8015 Modified analysis also detects gasoline range (C4-C12) hydrocarbons. However, no gasoline range hydrocarbons were detected during hydrocarbon analysis. A summary of investigation soil analytical results is

provided in Table 1.

As shown in Table 1, diesel was detected in 4 of 20 soil samples in concentrations ranging from 43 to 9,700 mg/kg. Toluene, ethylbenzene, and xylenes were detected in 1 of 20 soil samples analyzed in concentrations of 0.058, 0.87, and 1.1 mg/kg, respectively. Diesel, toluene, ethylbenzene, and xylenes were detected in boring B4, located adjacent to the former fuel pump. This boring was advanced based on visual and olfactory indications of petroleum hydrocarbons present in an excavation sidewall generated during the removal of the fuel pump. One soil sample was collected by hand (sample EX-soil) from the excavation sidewall and analyzed. Analysis indicated a concentration of diesel range hydrocarbons at 2,400 mg/kg. The location of boring B4 was based on the results of sample EX-soil and placed immediately adjacent to the sampling location.

Based on the results of samples analyzed from boring B4, the vertical extent of diesel-impacted soils was approximately seven feet bgs. Borings B3, B5, and B6 were advanced to determine the lateral extent of impacted soils detected in boring B4. Diesel-range hydrocarbons and BTEX were not detected in samples collected from these borings. Furthermore, diesel hydrocarbons and BTEX were not detected in other soil samples analyzed.

#### SOIL MITIGATION

Based on the results of the investigation and estimated volume of diesel-impacted soils (less than 30 cubic yards), removal of impacted soils from the subject site was proposed to the SFSFD as the preferred mitigation method. Soil mitigation activities were conducted based on verbal approval by SFSFD. SFSFD cleanup goals established for the subject site were based on Los Angeles Regional Water Quality Control Board's (LARWQCB) May 1996 Interim Site Assessment & Cleanup Guidebook, Table 4-1: Maximum Soil Screening Levels for TPH and BTEX above Drinking Water Aquifers. A diesel hydrocarbon cleanup goal of 1,000 mg/kg was approved by SFSFD as the cleanup goal.

Mitigation activities included sampling stockpiled soil previously generated during AST removal activities (Stockpile-A), excavating diesel-impacted soils, collecting confirmation soil samples from excavation bottom and sidewalls, and sampling of stockpile soils generated during mitigative activities (Stockpile-B). A copy of the letter from SCS to SFSFD, dated September 22, 2000 summarizing the results of discussions is provided in Appendix C.

#### Soil Mitigation Objectives and Activities

Based on the Phase II investigation, SCS proposed to excavate diesel-impacted soils located within the vicinity of boring B4. Soil mitigation objectives included excavating, stockpiling, characterizing, and transporting off site diesel-impacted soils to a licensed disposal/treatment facility.

Diesel-impacted soil mitigation activities were conducted by SCS on September 26, 2000. SCS utilized a backhoe for excavating soils and an on site mobile laboratory for soil sample analyses. Soil excavation activities began in the area of boring B4 and proceeded based on visual and olfactory observations made by SCS personnel. Soils encountered during excavation activities were primarily gray to olive gray.

Intermediate soil samples were collected for laboratory analysis from the bottom and west sidewall of the excavation to assess concentrations of hydrocarbons in soils. These samples (EXB-1S and EXSW-1W) were collected from approximately 5.5 and 5 feet bgs, respectively.

Based on intermediate sample results, soil removal continued until excavation sidewalls and bottom soils were brown to grayish brown in color. Confirmation soil samples were then collected from each of the four sidewalls and bottom of excavation. Results of confirmation soil sampling indicated concentrations of diesel were non-detect to 160 mg/kg which is below the cleanup goal of 1,000 mg/kg. Therefore, based on analytical results obtained on site, excavation activities were stopped. Final excavation dimensions were approximately 14 feet wide by 20 long and 9 feet deep.

On October 11, 2000, soils excavated during mitigation activities were loaded into trucks and transported to a licensed disposal facility under non-hazardous waste manifest. Approximately 61.60 tons of diesel-impacted soil was transported to American Remedial Technologies, Inc. (ART) of Lynwood, California for treatment/recycling. Copies of manifests and weight certificates are provided in Appendix D.

#### Materials and Methods

Soil samples collected from soil stockpiles, bottom, and sidewalls of excavation were recovered in 4-inch long by 2-inch diameter brass sleeves placed within a stainless steel sampler. Upon collection, the ends of the brass sleeve were covered with Teflon squares and plastic ends caps. Samples were relinquished under chain-of-custody documentation to an on site mobile laboratory provided by Mobile One.

With the exception of Stockpile B, soil samples were analyzed for diesel-range hydrocarbons, VOCs, and semi-VOCs (SVOCs) by EPA Methods 8015 Modified, 8260B, and 8270C, resepctively. As requested by ART, Stockpile B was analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH) by EPA Method 418.1.

#### SOIL MITIGATION ANALYTICAL RESULTS

As stated earlier, samples EXB-1S and EXSW-1W were intermediate soil samples collected during soil removal activities to assess concentrations of diesel in soil as excavation activities progressed. Concentrations of diesel in these samples were 35,000 and 13,000 mg/kg, respectively.

Analytical results of confirmation soil samples indicate sample EXB2 @ 9' had a concentration of diesel at 160 mg/kg. Diesel was not detected in the other five confirmation samples. Results of VOC and SVOC analyses do not indicate that soils are impacted by any of these constituents. Therefore, analytical results of soil samples indicate soils left in place are below cleanup goals established for the subject site. Analytical results, chain-of-custody documentation, and QA/QC are provided in Appendix E.

#### CONCLUSIONS AND RECOMMENDATIONS

Based on investigation and soil mitigation activities, SCS provides the following summary:

- Soil sampling data obtained during investigation activities suggests that there was one
  area of diesel-impacted soil in the vicinity of the former fuel pump. This area, in the
  vicinity of boring B4, appeared limited to soils less than five to seven feet bgs and did not
  extend beyond 10 feet horizontally in any direction from boring B4.
- As part of aboveground storage removal and soil mitigation activities, approximately
  61.60 tons of diesel-impacted soils were excavated from the area of boring B4,
  stockpiled, characterized, and transported off site to a licensed disposal/treatment facility
  under non-hazardous waste manifest.
- Based on confirmation soil samples obtained from the bottom and sidewalls of the
  excavation, soils left in place are below cleanup guidelines approved by SFSFD.

Therefore, based on investigation and soil mitigation activities completed to date, SCS recommends that the Santa Fe Springs Fire Department issue a "no further action" letter for the former diesel aboveground storage tank and associated fueling system.

**FIGURES** 

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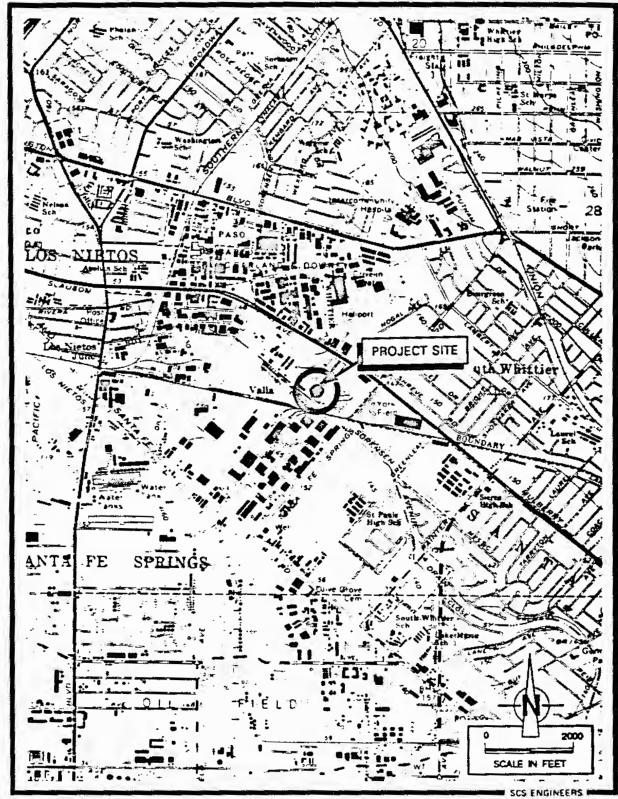
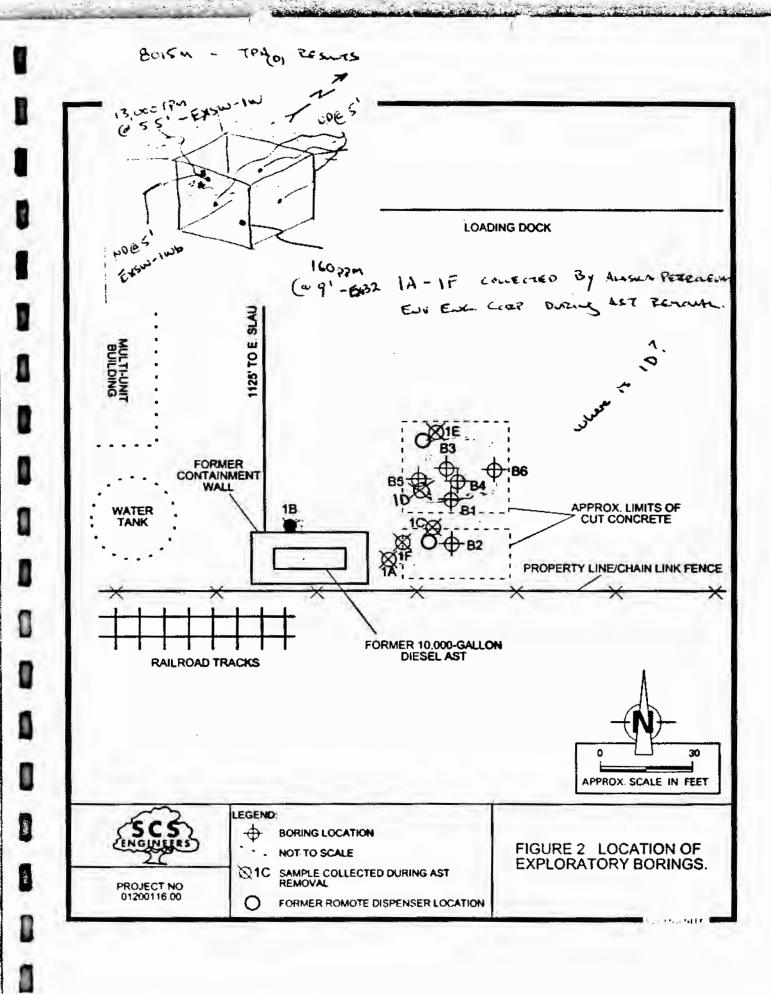
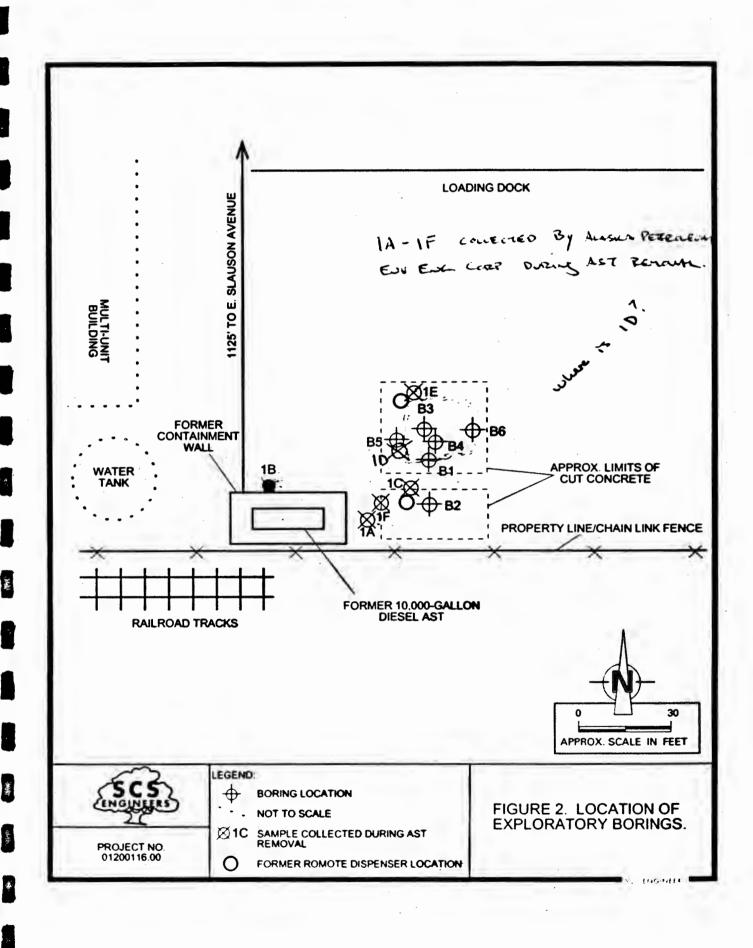
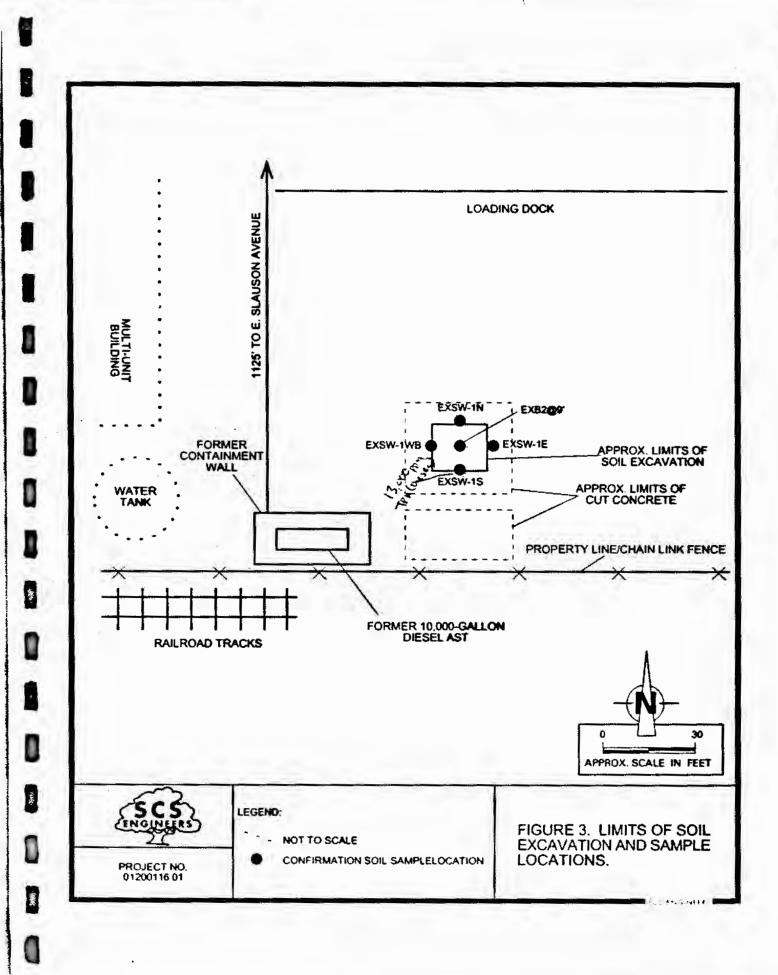


Figure 1. Project Site Location.





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**TABLES** 

## TABLE 1 PRINCIPAL CAPITAL MANAGEMENT, LLC ANALYTICAL DATA FOR SOIL SAMPLES SLAUSON DISTRIBUTION CENTER 12500 EAST SLAUSON AVENUE SANTA FE SPRINGS, CALIFORNIA

Sample Name/ ID	Sample Matrix/	TPII-Diesel EPA Method 8015 mg/kg	MTBE EPA Method 8020 mg/kg	Benzene EPA Method 8020 mg/kg	Toluene EPA Method 8020 mg/kg	Ethylbenzene EPA Method 8020 mg/kg	Xylenes EPA Method 8020 mg/kg
B1-5'	soil/5 feet	<10	< 0.05	<0.005	< 0.005	< 0.005	< 0.015
B1-10'	soil/10 feet	<10	<0.05	<0.005	<0.005	< 0.005	<0 015
B1-15'	soil/15 feet	<10	< 0.05	< 0.005	< 0.005	< 0.005	< 0.015
B2-5'	soil/5 feet	<10	< 0.05	< 0.005	< 0.005	< 0.005	s 0 015
B2-10'	soil/10 feet	<10	<0.05	<0.005	<0.005	<0.005	<0.015
B2-15'	soil/15 feet	<10	< 0.05	<0.005	< 0.005	< 0.005	< 0.015
B3-5'	soil/5 feet	<10	<0.05	< 0.005	<0.005	< 0.005	< 0.015
B3-10'	soil/10 feet	<10	< 0.05	<0.005	< 0.005	< 0.005	< 0.015
- B3-15'	soil/15 feet	<10	<0.05	< 0.005	< 0.005	< 0.005	< 0.015
B4-5'	soil/5 feet	9,700 <sup>(2)</sup>	<0.05	< 0.005	0.058	0.87	1.1
B4-10'	soil/10 feet	73 b	<0.05	<0.005	<0.005	< 0.005	< 0.015
B4-15'	soil/15 feet	43 O	<0.05	< 0.005	<0.005	< 0.005	< 0.015
B4-20'	soil/20 feet	<10	< 0.05	<0.005	<0.005	< 0.005	< 0.015
B5-5'	soil/5 feet	<10	<0.05	<0.005	<0.005	<0.005	< 0.015
B5-10'	soil/10 fcet	<10	<0.05	<0.005	<0.005	<0.005	< 0.015
B5-15'	soil/15 feet	<10	<0.05	<0.005	<0.005	< 0.005	< 0.015
B6-5'	soil/5 feet	<10	<0.05	<0.005	<0.005	<0.005	< 0.015
B6-10'	soil/10 feet	<10	<0.05	<0.005	<0.005	<0.005	< 0.015
B6-15'	soil/15 fcet	<10	<0.05	<0.005	<0.005	<0.005	< 0.015
EX-Soll	soil/1.5 feet	2,400	<0.05	<0.005	< 0.005	< 0.005	< 0.015

Notes:

TPH - Total Petroleum Hydrocarbons

mg/kg = milligrams per kilogram, or parts per million All analyses performed by Mobile One Leboratories

# TABLE 2 PRINCIPAL CAPITAL MANAGEMENT, LLC CONFIRMATION SOIL SAMPLE ANALYTICAL DATA SLAUSON DISTRIBUTION CENTER 12500 EAST SLAUSON AVENUE SANTA FE SPRINGS, CALIFORNIA

Sample Name/ ID	Sample Location/	TPII-Gas EPA Method 8015M mg/kg	TPII-Diesel EPA Method 8015M mg/kg	TRPII EPA Method 418.1 mg/kg	VOCs EPA Method 8260B ug/kg	SVOCs EPA Method 82700 mg/kg
SP-1	stockpile A	<10	2,400	4,000	nd*	**
SP-2	stockpile A	<10	420	140	nd*	nd
SP-3	stockpile B	<10		3,200	nd*	
SP-4	stockpile B	<10		820	nd*	
EXB-1S	bottom/5.5 feet	<10	35,000 156	••	nd*	nd
EXB2@9'	bottom/9 feet	<10	1.842 (160) 44.		nd*	nd
EXSW-IW	sidewall/5 feet	<10	1 0 13,000	••	nd*	nd
EXSW-1N	sidewall/5 feet	<10	<10	••	nd*	nd
EXSW-1E	sidewall/5 feet	<10	<10		nd*	nd
EXSW-IS	sidewall/5 feet	<10	<10		nd*	nd
EXSW-1Wb	sidewall/5 feet	<10	<10		nd*	nd

#### Notes.

TPH . Total Petroleum Hydrocarbons

TRPH - Total Recoverable Petroleum Hydrocarbona

mg/kg = milligrams per kilogram, or parts per million

ug kg \* micrograms per kilogram, or parts per billion

nd - None detected

\* - Methylene chloride detected in sample and in blank

\*\* = Fluoranthene detected at 780 ug/kg and bis(2-Ethylbexyl)phthalate detected at 790 ug/kg

All analyses performed by Mobile One Laboratories

Table 4-1: Maximum Soil Screening Levels (mg/kg) for TPH and BTEX above Drinking Water
Aquifers

T	Distance Above		Carbon Range					
P	Groundwater	C4-C12	C13-C22	C23-	C23-C32			
H	>150 feet	1,000	10,000	50,0	00			
	20-150 feet	500	1,000	10.00	00			
1	<20 feet	100	1,00	1,000				
	Distance		Lithology					
B	Above Groundwater	Gravel	Sand	Silt	Clay			
EX	150 feet	B=0.044 T=2 E=8 X=23	B=0.077 T=4 E=17 X=48	B=0.165 T=9 E=34 X=93	B=0.8 T=43 E=170 X=465			
	80 feet	B=0.022 T=1 E=4 X=11	B=0.033 T=2 E=7 X=20.	B=0.066 T=4 E=15 X=40	B=0.34 T=18 E=73 X=200			
	20 feet	B=0.011 T=0.15 E=0.7 X=1.75		B=0.011 T=0.45 E=2 X=5.3	B=0.044 T=2.3 E=9 X=24.5			

- TPH = Total petroleum hydrocarbons.
- BTEX = benzene, toluene, ethylbenzene, and xylenes, respectively. MCLs (ppm): B=0.001, T=0.15, E=0.7, X=1.75
- MTBE (methyl tertiary butyl ether) must be included in BTEX analyses.
- BTEX screening concentrations determined per the attenuation factor method as described in RWQCB Guidance
  for VOC Impacted Sites (March 1996), with a natural degradation factor of 11 for benzene. Table values for
  BTEX can be linearly interpolated between distance above groundwater and are proportional to fraction of each
  lithological thickness.
- Values in Table 4-1 are for soils above drinking water aquifers. All groundwaters are considered as drinking water resources unless exempted by one of the criteria as defined under SWRCB Resolution 88-63 (TDS>3000 mg/L, or deliverability <200 gal/day, or existing contamination that cannot be reasonably treated). Regional Board staff will make a determination of potential water use at a particular site considering water quality objectives and beneficial uses. For non-drinking water aquifers, regardless of depth, TPH for ">150 feet" category in the table should be used, BTEX screening levels are set at 100 times respective MCLs as preliminary levels determined to be protective of human health and the environment.
- Distance above groundwater must be measured from the highest anticipated water level. Lithology is based on the USCS scale.
- For BTEX, each component is not to exceed the specified screening level.
- For TPH, the total allowable for each carbon range is not to be exceeded. In areas of naturally-occurring hydrocarbons, Regional Board staff will make allowance for TPH levels.
- BTEX to be analyzed by EPA Method 8020 or EPA Method 8260 (usually for confirmation).
- TPH to be analyzed by EPA Methods 418.1 plus 8015 (Modified). Ranges of TPH to be analyzed by GC/MS carbon range methods (EPA Method 8260) or EPA Method 8015 (Modified).

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	APPENDIX A	
	BORING LOGS	
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**BORING LOG** 3711 Long Beach Boulevard, 9th Flr. **BORING NUMBER: B1** Page 1 of 1 Long Beach, California 90807-3315 JOB NUMBER: 01200116.00 Principal REMARKS 12500 E. Slauson Ave. Exploratory bonng Santa Fe Springs, CA Depth Sample Information Completion Detail Description Blow (mdd) 81015 a a Drilling Company: TEG Date Started 9/12/00 Time Started 08:25 Drilling Method: Direct Push Date Ended 9/12/00 Time Ended 09:00 Logged By D. Ness Total Depth: 20.0 R Bonng Diameter 1.5" Sampling Method Split spoon

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**BORING LOG** 3711 Long Beach Boulevard, 9th Fir. **BORING NUMBER: B2** Page 1 of 1 Long Beach, California 90807-3315 JOB NUMBER: 01200116.00 Principal REMARKS 12500 E. Slauson Ave. **Exploratory bonng** Santa Fe Springs, CA Depth Sample Information Completion Detail USCS Soil Class. Description meters Blow (mdd) B2@5 B2@10 82015 a Brown stiff clay, moist, no odor B2@20" a TEG Drilling Company: Date Started: 9/12/00 Time Started: 09:25 Drilling Method: **Direct Push** 10:10 Date Ended Time Ended. 9/12/00 Logged By: D. Ness Total Depth: 20.0 R Bonng Diameter 1.5 Sampling Method: Split spoon

della Color

**BORING LOG** 3711 Long Beach Boulevard, 9th Fir. **BORING NUMBER: B3** Page 1 of 1 Long Beach, California 90807-3315 JOB NUMBER: 01200116.00 Principal REMARKS. 12500 E. Slauson Ave. Exploratory boring Santa Fe Springs, CA Completion Detail Graphic Log Description meters Blow (mdd) ee Brown sitty sand, micaceous, moist, no odor 83010 α Brown medium stiff clay with micaceous sand, moist, no 83@15 B3@20 Brown to olive gray stiff clay with trace sand and sill, most, no odor **Drilling Company:** TEG Date Started: 9/12/00 10:30 Time Started: Onlling Method: **Direct Puek** Date Ended: 9/12/00 Time Ended: 10:55 Logged By: D. Ness Total Depth: 20.0 R Boring Diameter: 1.5" Sampling Method: Split spoon

**BORING LOG** 3711 Long Beach Boulevard, 9th Flr. **BORING NUMBER: B4** Page 1 of 1 Long Beach, California 90807-3315 JOB NUMBER: 01200116.00 Principal REMARKS 12500 E. Slauson Ave. **Exploratory bonng** Santa Fe Springs, CA Sample Information Completion Detail Description Blow (mdd) 84010 Gray clayey silt w most, slight odor 84015 a Gray stiff clay with some silt, moist, no odor 84020 Olive gray to brown stiff clay, moist, no odor Drilling Company: TEG Date Started 9/12/00 Time Started 11:25 **Drilling Method:** Direct Push Date Ended: 9/12/00 Time Ended: 12:05 Logged By **Total Depth** 20.0 € Boring Diameter: 1.5" Sampling Method Split spoon

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**BORING LOG** ENGINEERS 3711 Long Beach Boulevard, 9th Fir **BORING NUMBER: B5** Page 1 of 1 Long Beach, California 90807-3315 JOB NUMBER: 01200116.00 Principal REMARKS 12500 E. Slauson Ave. Exploratory bonng Santa Fe Springs, CA Sample Information Completion Detail Description Dlow Counts (mdd) B5@15 Brown stiff clay, moist, no odor Drilling Company TEG Date Started 9/12/00 Time Started: 12:25 **Drilling Method** Direct Push Date Ended: 9/12/00 Time Ended: 12:55 Logged By D. Ness Total Depth: 15.0 R Bonng Diameter. 1.5 Sampling Method Split spoon

**BORING LOG** 3711 Long Beach Boulevard, 9th Flr. **BORING NUMBER: B6** Page 1 of 1 Long Beach, California 90807-3315 JOB NUMBER: 01200116.00 Principal REMARKS Exploratory borns 12500 E. Slauson Ave. Santa Fe Springs, CA Depth Sample Information Completion Detail Description Blow (mdd) leet a TEG **Drilling Company** Date Started 9/12/00 Time Started 13:05 **Dolling Method** Direct Push Date Ended. 9/12/00 Time Ended: 13:30 Logged By. D. Hess Total Depth 15.0 R Bonng Diameter 1.5" Sampling Method Split spoon

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		SCS ENGINEERS —
•	APPENDIX B	
	SITE INVESTIGATION ANALYTICAL DATA	
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9/15/00

SCS Engineers 3711 Long Beach Blvd., 9th Floor Long Beach, CA 90807

Project Name: Lawson Distribution

Project No.:

01200018.00 W.O.176

Attention:

Mr. Tom Dong

Mobile One Laboratories received and analyzed the following sample(s):

Date Received

Quantity Matrix

Date Received Quantity Matrix

9/12/00

20

moil

The samples were analyzed by one or more of the EPA methodologies or equivalent methods as specified below.

TPH -- CA DES "Total Petroleum Hydrocarbons"

BTEI -- EPA Method 8020

TRPH -- EPA Method 418.1, modified for soils

VOC# -- EPA Method 8260

The results are included with a summary of the quality control procedures. Please note that the symbol "nd" indicates a value below the reporting limit for the particular compound in the sample. Flags qualifying the data are explained in footnotes on the same report page as they occur.

Please feel free to call us to discuss any part of this report or to schedule future projects.

Sincerely,

Reperca L. Johnson

President

James B. Picker, Ph.D

Mobile Drw Laboratories is certified by the California Department of Health Services (certificate Mas 1194, 1561, 1921, 2088, 2278).

SCS091200 MOL Project #



#### Report Summary

Client: Project: SCS Engineers

Lawson Distribution

Matrix: soil

Units: mg/kg

	8020		>
TBE Benzen	e Toluene	Ethyl- benzene	Xylenes
.05 0.005	0.005	0.005	0.015
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	0.058	0.87	1.1
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
nd nd	nd	nd	nd
			1124

#### Footnotes:

nd = Not found above the detection limit.

- & = Gasoline range organics not identified as gasoline.
- # = Diesel range organics not identified as diesel.
- = Sample dilution was required. Detection limits were adjusted accordingly.
- E = Analyte amount exceeds calibration range. Amount quantitated by extrapolation.
- \*\* = This compound has been screened by EPA method 8020. Any positive results should be confirmed by a second analysis.
- ## = A second analysis has been performed on this sample by Mass Spectrometry. The results are as indicated.

Analyses performed by: Bret Hutchinson

SCS091200



#### QC Summary

Client

SCS Engineers

**Project**:

Lawson Distribution

Matrix: soil

TPH gasoline	TPH diesel	TRPH	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
(67-125)	(67-125)	(75-126)	(60-125)	(60-125)	(59-125)	(52-125)	(60-127)
<30	<30	<30	<30	<30	<30	<30	<30
			1.00	0.100	0.100	0.100	0.300
	270		0.951	0.094	0.091	0.092	0.269
	251		0.890	0.083	0.086	0.088	0.269
	103.8		92.1	88.5	88.5	90.0	89.7
	7.3		6.6	12.4	5.6	4.4	0.0
	gasoline (67-125)	gasoline diesel (67-125) (67-125) <30 <30  251 270 251 103.8	gasoline diesel (67-125) (67-125) (75-126) <30 <30 <30  251 270 251 103.8	gasoline diesel           (67-125)         (67-125)         (75-126)         (60-125)           <30	gasoline diese!           (67-125)         (67-125)         (75-126)         (60-125)         (60-125)           <30	gasoline diese!           (67-125)         (67-125)         (75-126)         (60-125)         (60-125)         (59-125)           <30	gasoline         diesel         benzene           (67-125)         (67-125)         (75-126)         (60-125)         (59-125)         (52-125)           <30

Calibration verification was within acceptable limits.

SCS091200



### **QC Summary**

Client Project: SCS Engineers **Lawson Distribution**  Method Blanks

Matrix soil Units: mg/kg

Method =	TPH	TPH	TRPH	<		- 8020		>
Analyte =	Gasoline C <sub>e</sub> -C <sub>12</sub>	Diesel C <sub>13</sub> -C <sub>24</sub>		MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
Detection Limit -	10	10	10	0.05	0.005	0.005	0.005	0.015
SAMPLE I.D.			4					
Date Analyzed: 9/12/00 blank GCSF blank GCSR		nd nd						
blank GC7				nd	nd	nd	nd	nd
blank GC12c				nd	nd	nd	nd	nd

SCS091200

MORNES ONE LABORATORIES INC

## CHAIN-OF-CUSTODY RECORD

MOL: 5CS 091200

Date: 125407.00 Page 1 of 2 148 So. Vinewood Street, Escondido, CA 92029-1921 (760) 735-3208 FAX (760) 735-2469 Analysis Requested Turnaround Requested: Client: 5CS Water Strate Strate Onsite/24-48 hrs. THE TRAIN STATE OF THE PROPERTY OF THE PROPERT Strik, Wilder ph Bold 77H26017M 784T Site Address: Offsite 4C913018710 PHY 30 POLIO Other Project No.: \_\_\_ Sampler/Project Manager: Date Sample ID Time Location 3105 12501.00 0235 BI @ 10' 0340 BIQ 151 3 0845 HOLD 0900 BI@ 20' 320,5 520 10 0940 0955 40117 020 20 1010 33051 1035 33010 1040 3 B3@15' 1255 EX SOIL 1057 1130 1140 B4010 1150 Comments: Sample Receipt Intact: Seal Intact: Refinquished by (Signature) Received by (Signature) Time: Date: ZLCAT.00 Yes No NA Received by: (Signature) Relinquished by: (Signature) Time: Cold: Yes No Relinquished by: (Signature) Received by: (Signature) Date: Time: MATReceived on site)

MODILE/ONE LABORATORIES INC

### CHAIN-OF-CUSTODY RECORD

MOL: 5(5011200)

48 So. Vinewood Street, Escon	59				Da	te: 1249	かの Page	<u>2</u> of <u>2</u>			
Client: SCS				Turnaround I	Requesto	ed:	Ana	lysis Reque	sted		
Project No.:  Sampler/Project Manager:				Onsite/24-48 h	n.	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Aright S	ysis Reque	47.0 2.0 (a)	Asser Pres	To the last of the
Sample ID	Date	Time	Locatio	n	T Y						
b4@ 20'	125001.00	1205		······	X	X				5	,
64@ 20' 65@5'		1230			X	X				<del> </del>	
B5@17		1235			Y	X					1
β5@15' β6@5'		1255			<b>*</b>	X				5	/
B6@5'		1310	711.1		X						1
B6@10		13/5		,,, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	<b>X</b>	12					1
B6@15'			···.		X	<u> </u>					
			***************************************						<del>                                      </del>		<u> </u>
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									<del>-  </del>		<u> </u>
							1	+-			
				- ··· <sub></sub>			-   -				
Comments:				<del></del>							
Commences.										Sample Re	ceipt
										Intact: (Yes) No	
telinquished by (Sign dire)			Received by: (Sig	the				Date: 25091.00		Seal Intact: Yes No	
clinquished by: (Signature)			Received by: (Sig	nature)				Date:	Time:	Cold:	~
Relinquished by: (Signature)		<u></u>	Received by: (Sig	nature)	•	·····		Date:	Time:	Yes No	
Construe constitutes authorization	a to proceed with a	salvaia and accord	and of conditions on he	ali					L	_	

3717 Long Beach Boulevard Ninth Floor Long Beach, CA 90807-3315 562 426-9544 FAX 562 427-0805 http://www.scseng.com

## SCHENGINEERS

September 22, 2000 File No. 01200116.00

Ms. Brenda Nelson Santa Fe Springs Fire Department 11300 Greenstone Avenue Santa Fe Springs, California 90670 Phone: (562) 944-9713, ext. 155

Fax: (562) 941-1817

Subject: Soil Investigation Summary and Proposed Mitigative Action, Slauson
Distribution Center, 12500 East Slauson Avenue, Santa Fe Springs, California

#### Ms. Nelson:

Per our telephone conversation this morning, this letter provides a summary of our soil investigation and proposed mitigation measures.

- Results of our investigation indicate that diesel range hydrocarbons detected at the site
  are limited both vertically and laterally in area. We estimate an in-place volume of less
  than 30 cubic yards of diesel-impacted will be excavated and transported off site to a
  licensed disposal facility under non-hazardous waste manifest.
- Anticipated soil excavation dimensions will be approximately 7 feet wide, 7 feet long and approximately 7 feet below grade. However, final dimensions will be dictated by confirmation soil sampling analytical results.
- Santa Fe Springs Fire Department does not object to SCS Engineers commencing
  mitigation activities provided confirmation soil samples are collected from each of the
  four sidewalls and bottom of excavation and submitted to a California state-certified
  analytical laboratory.
- All five confirmation soil samples will be analyzed for diesel-range (C13-C22)
  petroleum hydrocarbons, volatile organic compounds including methyl tert butyl ether,
  and semi-volatile organic compounds by EPA Methods 8015 Modified, 8260B, and
  8270, respectively.
- One report including soil investigation and results of mitigative action will be submitted
  to Santa Fe Springs Fire Department. The report will be submitted on an "expedited"
  review process to obtain "No Further Action" status for the property.

Please contact either of the undersigned if you have further comment or questions regarding this report.

Sincerely,

Darren R. Ness

Staff Scientist

SCS ENGINEERS

Tim Day

Tom Dong, R.E.A. Vice President

cc:

Mr. Dave Dimond, Principal Capital Management, LLC

Ms. Amy J. Witten, Legacy Partners

## APPENDIX D

er traditioner specimental i sur Miller og stranger i surfame til forskling fra stranger fram til help skiller Miller

NON-HAZARDOUS WASTE MANIFES AND WEIGHT CERTIFICATION

TECHNOLOGIES Organization Name		Daily Received Report  Report Print Date: 10/12/00 9:15:			Selected Start Date for Report: Selected Ending Date for Report:		10/11/ <b>00</b> 10/11/ <b>00</b>
		•			et Number Manifest Number		Net-Tons
SCS Engineer		19/11/99	20001785		037557	00001	21.82
					037558	00002	22.94
					037559	00005	16.84
	Total For Job: 20	001785	On Date: 10/11/	700	Number of	Loads: 3	61.60
	Total For Job: 2	0001785			Number of	Loads: 3	61.60
	Total For SCS	Engineers		 . !	Number of	Loeds: 3	61.60
	•=•			•	(	Grand Total:	- 61.60

Ticket No.: 037557

Time in:

Time out:

Date: 10/11/00

Scale: SCL#1

signature

8:22

8:22

## REMEDIAL TECHNOLOGIES

#### WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmester, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Carrier: 0822 J. TORRES CO. INC.

Customer: 0926 SCS ENGINEERING

Truck: J1988 Trailer: 988T

Product: 01 SOIL-LTTD TREAT Job: 20001785 Manifest: 9000:

W6T IN: Gross: 73,726 LBS SCL#1

Tare: 30,080 LBS STORED

Net: 43,640 LBS = 21,82 Jons

Duivan constant

To my knowledge nothing has been added nor has soil been tempered with since loading little truck for delivery to Facility.

2880 SEMINOLE AVENUE, LYNWOOD, CA 90262 TEL: (213) 357-1900 (800) 401-4988 FAX (213) 357-1900

AMERICAN REMEDIAL TECHNOLOGIES

P.O. Box 970 2680 Seminole Avenue • Lynwood, California 90262 (323) 357-1900 • Fax (323) 357-1900 • (800) 401-4988

	1. Generators US	ETA ID NO.		Z. Manifest Docum	erit No.		
NON-HAZARDOUS WASTE MANIFEST				00001			
Generator's Name and Making Address			4. Site Address				
Slauson Distribution ( 12500 East Slauson / Santa Fe Springs, CA	Ave.						
Transporter 1 Company Ivamo	13-240-138	6. US EPA 10 NUMBER CAD 9 8 0 8 8		7. Transporter's Pr	one No		
1	S88 IT		3542				
Designated Facility Name and Sile Address	77	DADSEAND Number	7046	10. Facility's Phon	32-2635		
American Remedial Technology 2680 Seminole Avenue Lynwood, California 90262	ogies, Inc.	CALOGOI	31034	(3:	23) 357-190	0	
Weste Snipping Name and Description				Containers No. Type	Total Quartery	Unit WE / WK	
Non-Hazardous waste, solid. Soil contaminated with hydro	ocarbons.						
Z. Special Hendling Instructions and Additional Infor	meson		ART AD	proval No. ·	ART	ob No.	
Wear appropriate P.P.E. Wear gloves and goggles. Is the soil subject to 1166 m	entering?		2785		200017	95	
	NO		N. S.				
TITORES CERTIFICATION: I curily the n	reteriate described ab		exchinat to federal	regulations for report	ng disposel of He. Month	Day Ye	
THOMAS			Thom	w 13-	100	11 0	
14. Transporter 1 Action/redgement of Receipt of Mil- Trining / Types-manus T .	Rojes	5.0	Le	- Kz	10	11 0	
Discrepancy Indication Space     Security Owner or Operator. Carolication of reces	X of waste materials o	overed by the manifest exc	epi as rolled in lie-	m 13.			
Printed / Typed Name		Sq	ratura /			Day Ye	

Carriers

#### WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity we weighed, measured, or counted by a weightnester, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Mosourement Standards of the California Department of Food and Agriculture.

Ticket No. : 037556

Date: 18/11/80 8:32 Time int Time outs 8:32 Scale: SCL#1

Manifest: 00002

Weighmaster signature

Customer: 0926 SCS ENGINEERING

Trucks JIRR Trailers BBT

Product: 01 SOIL-LTTD TREAT

WOT IN: Gross: 76,848 LBS SCLAI

0822 J. TORRES CO. INC.

STORED Tare: 30,960 LBS

22.94 Tons Net: 45,888 L85 Driver simatu

2680 SEMINOLE AVENUE LYNWOOD, CA 90262 TEL (213) 357-1900\* (800) 401-4060 FAX (213) 357-1900

Job: 20001785



P.O. Box 970 2680 Seminals Avenue - Lynwood, California 90262 (323) 357-1900 - Fax (323) 357-1909 - (800) 401-4988

WASTE MANIFEST	ON-HAZARDOUS			2. Manifest Document No. 0 0 0 0 2				
Stauson Distribution 12500 East Stauson Santa Fe Springs, C	Ave.	20	4. Site Address				,	
. Transporter 1 Company Name	1021010	6. US EPA ID Number	-	7. Transporter	s Phone	MG.	_	_
J Torres Co JE	1 88	CADRADAS	7046	10. Facility's P		2-2635		
American Remedial Techno 2680 Seminole Avenue Lynwood, California 90262	ologies, Inc.	CALOGO				357-190	0	
Weste Shipping Neme and Description				Conteners No. Ty	De .	Caurety	W.7	W.
Non-Hazardous waste, soli Soil contaminated with by			·m		1			
Wear appropriate P.P.E. Wear gloves and goggles. Is the soil subject to 1168  O YES  Weight	□ NO					* 3		
resect/lypes/name			Talian .			1	Day 	-3
14. Transcend   Accrownecement of Record of Person of Thomas  Thomas  15. Distripping Inducation Space  Agustin Arm	Dove	-	Thomas	- d	NY C	10		00
1 CA 1 2 14		s covered by the manufest as						

MERICAN

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity w real measured or counted by a weightnester, whose significant is on this cartificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with section 12700) of Division 5 of the California Business and Professions Code, administrated by the Division of Measurement Standards of the California Department of Food and Agriculture

> 8822 J. TORRES CO. INC. Carriers

0926 SCS ENGINEERING Customer:

JI42 Trailers 42T Truck:

01 SOIL-LITD TREAT Product:

WGT IN: SCL#1 Gross: 65,480 L82

> STORED Tare: 21,800 LBG

16.84 Tons Net: 33,660 LBS

Driver

To my knowledge nothing has been added not has sell been tempered with alnow loading into buck for delivery to Facility. 2680 SEMINOLE AVENUE, LYNWOOD, CA 90262 TEL (213) 357-1900 (600) 401-4966 FAX (213) 367-1909

Ticket No. : 037559

Date: 10/11/00 Time in: 8:44

Time out: 8:44

Scale: SCL#1

Manifest:

Job: 20001785

P.O. Box 970

2680 Seminole Avenue • Lymerood, California 90262 (323) 357-1900 • Fax (323) 357-1909 • (800) 401-4988

AMERICAN REMEDIAL TECHNOLOGIES

NON-HAZARDOUS WASTE MANIFEST		EERL O No.		E MENTER DOLLA	00005	
Slauson Distribution ( 12500 East Slauson / Santa Fe Springs, CA	Ave.	0	4. Sae Aggress			
Desgrand Facility have and Sta Accress  American Remedial Technology 2680 Seminole Avenue	T42	CALOUDI		10. Facility's Pron	832-2635 23) 357-190	ie
Lynwood, California 90262  Weste Shoong Name and Description				Containers No Type	Total Customby	UNE WL/WL
Non-Hazardous waste, solid. Soil contaminated with hydro	ocarbons.					
Weight Tie	NO cket		2785		200017	es V
TH CATA 1  Transporter 1 Administration of Recept of Ma	DONE		Thomas		10	11 0
1/	es co	5-0	Toute	& Mil	esa 10	1110
Clean u		1 Last	0 f Z	loade	19/1/00	
E. Facility Owner or Operator: Certification of recess mitted / Typed Name:	A CA WASHIN MERONINIS	CANADA ST SHE MANUAL CO.	rept on ratios in flore			Op. Vo

	1	
		SCS ENGINEERS
	•	
	APPENDIX E	
	SOIL MITIGATION ANALYTICAL DATA	
,		
•		
	•	
1		



9/29/00

SCS Engineers 3711 Long Beach Blvd., 9th Floor Long Beach, CA 90807-3315

Project Name:

Lawson Distribution

Project No.:

01200116.00

Attention:

Mr. Ton Dong

Mobile One Laboratories received and analyzed the following sample(s):

The state of the s

Date Received

Quantity Matrix

Date Received Quantity Matrix

9/26/00

11 soil

The samples were analyzed by one or more of the EPA methodologies or equivalent methods as specified below.

TPH -- CA DHS "Total Petroleum Hydrocarbons"

BTEX -- RPA Method 8020

TRPH -- EPA Method 418.1, modified for soils

VOCS -- EPA Nethod 8260

The results are included with a summary of the quality control procedures. Please note that the symbol "nd" indicates a value below the reporting limit for the particular compound in the sample. Flags qualifying the data are explained in footnotes on the same report page as they occur.

Please feel free to call us to discuss any part of this report or to schedule future projects.

Sincerely,

Repecca L. Johnson

President

Mobile One Laboratories is certified by the California Department of Memith Services (certificate #mi 1194,1561,1921,2088,2278).

MOL Project #

SCS092600



Client: Project: SCS Engineers
Lawson Distribution

Matrix: soil Units: mg/kg

Method = Analyte =	TPH Gasoline	TPH Diesel	TRPH	
Detection Limit	- 10	10	10	
SAMPLE I.D.				
Date Analyzed:	9/26/00, 9/27/00			
Blank GC14a	nd	- nd		
Blank GC14b	nd	nd		
blank Horiba2			nd	
SP-1	nd	2,400	4,000	
SP-2	nd	420	140	
SP-3			3,200	
SP-4			820	
EXB-18	nd	35,000 E		
EXB-2-9	nd	160		
EXSW-TW	nd	13,000		
EXSW-1N	nd	nd		
EXSW-1E	nd .	nd		
EXSW-18	nd	nd		
EXSW-1WB	nd	nd		
				•
				·

#### Footnotes:

nd = Not found above the detection limit.

- & = Gasoline range organics not identified as gasoline.
- # = Diesel range organics not identified as diesel.
- = Sample dilution was required. Detection limits were adjusted accordingly.
- E = Analyte amount exceeds calibration curve. Amount estimated.
- \*\* = This compound has been screened by EPA method 8020. Any positive results should be confirmed by a second analysis.
- ## = A second analysis has been performed on this sample by Mass Spectrometry. The results are as indicated.

Analyses performed by: Tamara Davis

SCS092600

## EPA Method 8260B (5035 Prep.)

Client: **SCS Engineers** Project:

Sample Name:

Analysis Date

Analysis Time

Dilution Factor:

Lawson Distribution

Blank

26 Sep 2000

8:28 am

SP-1 26 Sep 2000 12:09 pm

8P-2 26 Sep 2000 12:32 pm

26 Sep 2000

2:35 pm

EXB-2-9

Matrix:

Units:

soil

ug/kg



Compound	E.O.L	Amount Found	Amount Found	Amount Found	Amount Foun
Dichlorodifluoromethane	10	nd	nd	nd	nd
Chloromethane	10	nd	nd	nđ	nd
Vinyl Chloride	10	nd	nd	nd	nd
Bromomethane	10	nd	nd	nd	nd
Chloroethane	10	nd	nd	nd	nd
Trichlorofluoromethane	10	nd	nd	nd	nd
1,1-Dichleroethene	10	nd	nd	nd	nd
Methylene Chloride	10	20	250 B	430 B	93 B
Methyl-t-butylether	10	nd	nd	nd	nd
trans-1,2-Dichloroethene	10	nd	nd	nd	nd
1,1-Dichloroethane	10	nd	nd	nd	nd
2,2-Dichloropropane	10	nd	nd	nd	nd
cis-1,2-Dichloroethene	10	nđ	nd	nd	nd
Chloroform	10	nď	nd	nd	nd
Bromochloromethane	10	nd	nd	nd	nd
1,1,1-Trichloroethane	10	nd	nd	nd	nd
1,1-Dichloropropene	10	nđ	nd	nd	nd
Carbon Tetrachloride	10	nđ	nd	nd	nd
1,2-Dichloroethane	10	nd	nd	nd	nd
Benzene	10	nd	nd	nd	nd
Trichloroethene	10	nd	nd	nd	nd
1,2-Dichloropropane	10	nd	nd	nd	nd
Bromodichloromethane	10	nd	nd	nd	nd
Dibromomethane	10	nd	nd	nd	nd
cis-1,3-Dichloropropene	10	nd	nd	nd	nd
Toluene	10	nd	nd	nd	nd
trans-1,3-Dichloropropene	10	nd	nd	nd	nd
1,1,2-Trichloroethane	10	nd	nd	nd	nd
1,2-Dibromoethane	10	nd	nd	nd	nd
1,3-Dichloropropene	10	nd	nd	nd	nd

## EPA Method 82608 (5035 Prep.) continued

Client: SCS Eng Project: Lawson

SCS Engineers
Lewson Distribution

Matrix: soil Units: ug/kg

Sample Name:		Blank	SP-1	SP-2	EXB-2-9
Compound		mount Found	Amount Found	Amount Found	Amount Found
Tetrachloroethene	10	nd	nd	nd	nd
Dibromochloromethane	10	nd	nd	nd	nd
Chlorobenzene	10	nd	nd	nd	nd
Ethylbenzene	10	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane		nd	nd	nd	nd
m,p-Xylene	10	nd	nd	nd	nd
o-Xylene	10	nd	nd	nd	nd
Styrene	10	nd	nd	nd	nd
Bramoform	10	nd	nd	nd	nd
Isopropylbenzene	10	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	10	nd	nd	nd	nd
1,2,3-Trichloropropane	10	nd	nd	nd	nd
n-propylbenzene	10	nd	nd	nd	nd
Bromobenzen <del>e</del>	10	nd	nd	nd	nd
1,3,5-Trimethylbenzene	10	nd	nd	nd	nd
2-Chlorotoluene	10	nd	nd	nd	nd
4-Chlorotoluene	10	nd	nd	nd	nd
tert-Butylbenzene	10	nd	nd	nd	nd
1,2,4-Trimethylbenzene	10	nd	nd	nd	nd
sec-Butylbenzene	10	nd	nd	nd	nd
p-Isopropyltoluene	10	nd	nd	nd	nd
1,3-Dichlorobenzene	10	nd	nd	nd	nd
1,4-Dichlorobenzene	10	nd	nd	nd	nd
n-Butylbenzene	10	nd	nd	nd	nd
1,2-Dichlorobenzene	10	nd	nd	nd	nd
1,2-Dibromo-3-chloroprop	10	nd	nd	nd	nd
1,2,4-Trichtorobenzene	10	nd	nd	nd	nd
Hexachlorobutadiene	10	nd	nd	nd	nd
Naphthalene	10	nd	19	nd	nd
1,2,3-Trichlorobenzene	10	nd	nd	nd	nd
Surrogates Spiked	QC Lim	its(% Rec.)	2.7	Percent Recover	
DBFM 50 ng	80-120	107	109	99	97
1,2-DCA-d4 50 ng	65-135	118	124	108	101
Toluene - d8 50 ng	80-120	101	90	108	102
1,4-BFB 50 ng	65-135	111	91	183 **	118
Analyses performed by:			- 1	,	10020



Client: Project: SCS Engineers Lawson Distribution EPA Method 82608 (5035 Prep.)

Matrix: Units:

301 ug/kg

Sample Name: Analysis Date Analysis Time

Dilution Factor:

EXSW-1N 25 Sept 2000 3:07pm

EXSW-1E 26 Sept 2000 3:30pm

EXSW-18 26 Sept 2000 3:53pm

26 Sept 2000 4:15pm

EXSW-1WB



Diduon Facol.	•	•			
Compound	EOI	Amount Found	Amount Found	Amount Found	Amount Found
Dichlorodifluoromethane	10	nd	nd	nd	nd
Chloromethane	10	nd	nd	nd	nd
Vinyl Chloride	10	nd	nd	nd	nd
Bromomethane	10	nd	nd	nd	nd
Chloroethane	10	nd	nd	nd	nd
Trichlorofluoromethane	10	nd	nd	nd	nd
1,1-Dichloroethene	10	nd	nd	nd	nd.
Methylene Chloride	10	130 8	210 B	150 B	160 B
Methyl-t-butylether	10	nd	nd	nd	nd
trans-1,2-Dichloroethene	10	nd	nd	nd	nd
1,1-Dichloroethane	10	nd	nd	nd	nd
2,2-Dichloropropane	10	nd	nd	nd	nd
cis-1,2-Dichloroethene	10	nd	nd	nd	nd
Chloroform	10	nd	nd	nd	nd
Bromochloromethane	10	nd	nd	nd	nd
1,1,1-Trichloroethane	10	nd	nd	nd	nd
1,1-Dichloropropene	10	nd	nd	nd	nd
Carbon Tetrachloride	10	nd	nd	nd	nd
1,2-Dichloroethane	10	nd	nd	nd	nd
Benzene	10	nd	nd	nd	nd
Trichloroethene	10	nd	nd	nd	nd
1,2-Dichloropropane	10	nd	nd	nd	nd
Bromodichloromethane	10	nd	nd	nd	nd
Dibromomethane	10	nd	nd	nd	nd
cls-1,3-Dichloropropene	10	ba	nd	nd	nd
Toluene	10	nd	nd	nd	nd
trans-1,3-Dichloropropene	10	nd	nd	nd	nd
1,1,2-Trichloroethane	10	nd	nd	nd	nd
1,2-Dibromoethane	10	nd	nd	nd	nd
1,3-Dichloropropane	10	nd	nd	nd	nd

## EPA Method 8260B (5035 Prep.) continued

Client: Project: SCS Engineers
Lewson Distribution

Matrix: Units: soil

ug/kg

Sample Name:		EXSW-1N	EXSW-1E	EXSW-18	EXSW-1WB
Compound	E.O.L	Amount Found	Amount Found	Amount Found	Amount Found
Tetrachioroethene	10	nd	nd	nđ	nd
Dibromochloromethane	. 10	nd -	nd	nđ	nd
Chlorobenzene	10	nđ	nd	nđ	nd
Ethylbenzene	10	nđ	nd	nđ	nd
1,1,1,2-Tetrachloroethane	10	nđ	nd	nd	nd
m,p-Xylene	10	nd	nd	nd	nd
o-Xylene	10	nđ	nd	nđ	nd
Styrene	10	nđ	nđ	nđ	nd
Bromoform	10	nd	nđ	nd	nd
Isopropylbenzene	10	nď	nd	nd	nd
1,1,2,2-Tetrachloroethane	10	nd	nđ	nđ	nd
1,2,3-Trichloropropane	10	nd	nd	nd	nd
n-propylbenzene	10	nđ	nđ	nd	nd
Bromobenzene	10	nd	nd	nd	nd
1,3,5-Trimethylbenzene	10	nd	nd	nd	nd
2-Chlorotoluene	10	nd	nd	nd	nd
4-Chlorotoluene	10	nd	nd	nd	nd
tert-Butylbenzene	10	nd	nd	nd	nd
1,2,4-Trimethylbenzene	10	nd	nd	nd	nđ
sec-Butylbenzene	10	nd	nd	nd	nd
p-Isopropyltoluene	10	nd	nd	nd	nd
1,3-Dichlorobenzene	10	nđ	nd	nd	nd
1,4-Dichlorobenzene	10	nd	nd	nd	nd
n-Butylbenzene	10	nd	nd	nd	nd
1,2-Dichlorobenzene	10	nd	nd .	nd	nď
1,2-Dibromo-3-chloroprop	10	nđ	nd	nd	nđ
1,2,4-Trichlorobenzene	10	nđ	nd	nd	nd
Hexachlorobutadiene	10	nd	nd	nd	nd
Naphthalene	10	nd	nd	nd	nd
1,2,3-Trichlorobenzene	10	nd	nd	nd	nd
Surrogates Spiked	QCL	mits(% Rec.)		Percent Re	covery
DBFM 50 ng	80-12		98	99	100
1,2-DCA-d4 50 ng	65-13	5 101	101	102	102
Toluene - d8 50 ng	80-12	0 101	100	100	100
1,4-BFB 50 ng	65-13	5 115	112	112	112
Analyses performed by:	Tame	a Davis			



EPA Method 8270C (3550B or 3510C Prep.)

Client:

**SCS Engineers** 

Matrix: Units:

soil ug/kg

Project:

**Lawson Distribution** 

8P-1 Blank

8P-2 26 Sept 2000

EXB-2-9 26 Sept 2000

Analysis Date **Analysis Time** Dilution Factor:

Sample Name:

26 Sept 2000 11:59am

26 Sept 2000 1:35pm

12:31pm

3:11pm

Compound	E.Q.L	Amount Found	Amount Found	Amount Found	Amount Found
N-Nitrosodimethylamine	400	nd	nd	nd	nd
Pyridine	400	nd	nd	nd	nd
Aniline	400	nd	nđ	nd	nd
Phenol	400	nd	nd	nd	nd
bis(2-Chloroethyl)ether	400	nd	nd	nd	nd
2-Chiorophenol	400	nd	nd	nd	nd
1,3-Dichlorobenzene	400	nd	nd	nd	nd
1,4-Dichlorobenzene	400	nd	nd	nd	nd
Benzyl alcohol	400	nd	nd	nd	nd
1,2-Dichiorobenzene	400	nd	nd	nd	nd
2-Methylphenol	400	nd	nd	nd	nd
bis(2-chloroisopropyl)ether	400	nd	nd	nd	nd
4-Methylphenol	400	nd	nd	nd	nd
n-Nitroso-di-n-propylamine	400	nd	nd	nd	nd
Hexachloroethane	400	nd	nd	nd	nd
Nitrobenzene	400	nd	nd	nd	nd
Isophorone	400	nd	nd	nd	nd
2-Nitrophenol	400	nd	nd	nd	nd
2,4-Dimethylphenol	400	nd	nd	nd	nd
Benzoic Acid	400	nd	nd	nd	nd
bis(2-Chloroethoxy)methane	400	nd	nd	nd	nd
2,4-Dichtorophenol	400	nd	nd	nd	nd
1,2,4-Trichlorobenzene	400	nd	. nd	nd	nd
Naphthalene	400	nd	nd	nd	nd
4-Chloroaniline	400	nd	nd	nd	nd
Hexachlorobutadiene	400	nd	nd	nd	nd
4-Chloro-3-methylphenol	400	nd	nd	nd	nd
2-Methylnaphthalene	400	nd	nd	nd	nd
Hexachlorocyclopentadiene	400	nd	nd	nd	nd

## EPA Method 8270C (3550B or 3510C Prep.) continued

Client: Project:

**SCS Engineers** Lawson Distribution Matrix: Units:

soil

ug/kg



		Blank	8P-1	SP-2	EXB-2-9
	E.Q.L	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>
2,4,6-Trichlorophenol	400	nd	nd	nd	nd
2,4,5-Trichlorophenol	400	nd	. nd	nd	nd
2-Chloronaphthalene	400	nd	nd	nd	nd
2-Nitroaniline	400	nd	nd	nd	nd
Dimethylphthalate	400	nd	nd	nd	nd
Acenaphthylene	400	nd	nd	nd	nd
2,6-Dinitrotoluene	400	nd	nd	nd	nd
3-Nitroaniline	400	nd	nd	nd	nd
Acenaphthene	400	nd	nd	nd	nd
4-Nitrophenol	400	nd	nd	nd	nd
Dibenzofuran	400	nd	nd	nd	nd
2,4-Dinitrotoluene	400	nđ	nd	nd	nd
Diethylphthalate	400	nđ	nd	nd	nd
Fluorene	400	nd	nd	nd	nd
4-Chlorophenyl-phenylether	400	nd	nd	nd	nd
4-Nitroaniline	400	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	400	nd	nd	nd	nd
n-Nitrosodiphenylamine	400	nd	nd	nd	nd
Azobenzene	400	nd	nd	nd	nd
4-Bromophenyl-phenylether	400	nd	nd	nd	nd
Hexachlorobenzene	400	nd	nd	nd	nd
Pentachlorophenol	400	nd	nd	. nd	nd
Phenanthrene Phenanthrene	400	nd	nd	nd	nd
Anthracene	400	nd	nd	nđ	nd .
Carbazole	400	nd	nd	nd	nd
Di-n-butylphthalate	400	nd	nd	nd	nd
Fluoranthene	400	nd	<b>78</b> 0	nd	nd
Pyrene	400	nd	nd	nd .	nd
Benzidine	400	nd	nd	nd	nd
Benzo[a]anthracene	400	nd	nd	nd	nd
3,3'-Dichlorobenzidine	400	nd	nd	nd	nd
Chrysene	400	nd	nd	nd	nd
bis(2-Ethylhexyl)phthalate	400	nd	790	nd	nd
Di-n-octylphthalate	400	nd	nd	· nd	nd
Benzo[b]fluoranthene	400	nd	nd	nd	nd

EPA Method 8270C (3550 or 3510 Prep.) continued

Client: Project: SCS Engineers
Lawson Distribution

Matrix: soil Units: ug/kg

			Blank	SP-1	SP-2	<b>EXB-2-9</b>
		E.Q.L	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>
Benzo[k]fluoranthene		400	nd	nd	nd	nd
Benzo[a]pyrene		400	nd	nd	nd	nd
Indeno[1,2,3-cd]pyrene	3	400	nd	nd	nd	nd
Dibenz[a,h]anthracene	)	400	nd	nd	nd	nd
Benzo[g,h,i]perylene		400	nd	nd	nd	nd
Surrogates	Spiked	QCL	imits(% Rec.)		Percent Recover	¥
2-Fluorophenol	2000 ppb	25-12	1 89	82	76	78
Phenol-d5	2000 ppb	24-11	3 87	65	62	64
Nitrobenzene-d5	1000 ppb	23-12	0 93	79	81	78
2-Fluorobiphenyl	1000 ppb	30-11	5 95	460 M	102	102
2,4,6-Tribromophenol	2000 ppb	19-12	2 82	99	96	63
Terphenyl-d14	1000 ppb	18-13	7 90	134	116	106
Analyses performed by	y: Taman	a Davi	8			



#### EPA Method 8270C (3550B or 3510C Prep.)

Client:

**SCS Engineers** 

Matrix: Units:

soil ug/kg

Project: Sample Name:

**Analysis Date** 

Analysis Time

Dilution Factor:

**Lawson** Distribution

EXSW-1N EXSW-1E 26 Sept 2000 26 Sept 2000 3:42pm 4:13pm

1

EXSW-1S 26 Sept 2000 4:44pm

**EXSW-1WB** 26 Sept 2000 5:14pm

1

Compound	E.Q.L	Amount Found	Amount Found	Amount Found	Amount Found
N-Nitrosodimethylamine	400	nd	nd	nd	nd
Pyndine	400	nd	nd	nd	nd
Aniline	400	nd	nd	nd	nd
Phenol	400	nd	nd	nd	nd
bis(2-Chloroethyl)ether	400	nd	nd	nd	nd
2-Chlorophenol	400	nd	nd	nd	nd
1,3-Dichlorobenzene	400	nd	nd	nd	nd
1,4-Dichlorobenzene	400	nd	nd	nd	nd
Benzyl alcohol	400	nd	nd	nd	nd
1,2-Dichlorobenzene	400	nd	nd	nd	nd
2-Methylphenol	400	nd	nd	nd	nd
bis(2-chloroisopropyl)ether	400	nd	nd	nd	nd
4-Methylphenol	400	nd	nd	nd	nd
n-Nitroso-di-n-propylamine	400	nd	nd	nd	nd
Hexachloroethane	400	nd	nd	nd	nd
Nitrobenzen <b>e</b>	400	nd	nd	nd	nd
Isophorone	400	nd	nd	nd	nd
2-Nitrophenol	400	nd	nd	nd	nd
2,4-Dimethylphenol	400	nd	nd	nd	nd
Benzoic Acid	400	nd	nd	nd	nd
bis(2-Chloroethoxy)methane	400	nd	nd	nd	nd
2,4-Dichlorophenol	400	nd	nd	nd	nd
1,2,4-Trichlorobenzene	400	nd	nd	nd	nd
Naphthalene	400	nd	nd	nd	nd
4-Chloroaniline	400	nd	nd	nd	nd
Hexachlorobutadiene	400	nd	nd	nd	nd
4-Chioro-3-methylphenol	400	nd	nd	nd	nd
2-Methylnaphthalene	400	nd	nd	nd	nd
Hexachlorocyclopentadiene	400	nd	nd	nd	nd

## EPA Method 8270C (3550B or 3510C Prep.) continued

Client: Project: SCS Engineers

Lawson Distribution

Matrix: Units: soil

ug/kg



		EXSW-1N	EXSW-1E	EXSW-1S	EXSW-1WB
	E.Q.L	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>
2.4,6-Trichlorophenol	400	nd	nd	nd	nd
2,4,5-Trichlorophenol	400	nd	nd	nd	nd
2-Chloronaphthalene	400	nd	nd	nd	nd
2-Nitroaniline	400	nd	nd	nd	nd
Dimethylphthalate	400	nd	nd	nd	nd
Acenaphthylene	400	nd	nd	nd	nd
2,6-Dinitrotoluene	400	nd	nd	nd	nd
3-Nitroaniline	400	nd	nd	nd	nd
Acenaphthene	400	nd	nd	nd	nd
4-Nitrophenol	400	nd	nd	nd	nd
Dibenzofuran	400	nd	nd	nd	nd
2,4-Dinitrotoluene	400	nd	nd	nd	nd
Diethylphthalate	400	nd	nd	nd	nd
Fluorene	400	nd	nd	nd	nd
4-Chlorophenyl-phenylether	400	· nd	nd	nd	nd
4-Nitroaniline	400	nd	nd	nd	nd
4,8-Dinitro-2-methylphenol	400	nd	nd	nd	nd
n-Nitrosodiphenylamine	400	nd	nd	nd	nd
Azobenzene	400	nd	nd	nd	nd
4-Bromophenyl-phonylether	400	nd	nd	nd	nd
Hexachlorobenzene	400	nd .	nd	nd	nd
Pentachlorophenol	400	nd	nd	nd	nd
Phenanthrene	400	nd	nd	nd	nd
Anthracene	400	nd	nd	nd	nd
Carbazole	400	nd	nd :	nd	nd
Di-n-butylphthalate	400	nd	nd	nd	nd
Fluoranthene	400	nd	nd	nd	nd
Pyrene	400	nd	nd	nd	nd
Benzidin <b>e</b>	400	nd	nd	nd	nd
Benzo(a)anthracene	400	nd	nd	nd	nd
3,3'-Dichlorobenzidine	400	nd	nd.	nd	nd
Chrysene	400	nd	nd	nd	nd
bis(2-Ethylhexyl)phthalate	400	nd	nd	nd	nd
Di-n-octylphthalate	400	nd	nd	nd	nd
Benzo[b]fluoranthene	400	nd	nd	nd	nd

## EPA Method 8270C (3550 or 3510 Prep.) continued

Client: SCS Engineers
Project: Lawson Distribution

Matrix: soil Units: ug/kg

			EXSW-1N	EXSW-1E	EXSW-1S	EXSW-1WB
		E.O.L	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>	<b>Amount Found</b>
Benzo[k]fluoranthene		400	nd	nd	nd	nd
Benzo[a]pyrene		400	nd	nd	nd	nd
Indeno[1,2,3-cd]pyren	е	400	nd	nd	nd	nd
Dibenz[a,h]anthracene	•	400	nd	nd	nd	nd
Benzo[g,h,i]perylene		400	nd	nd	nd	nd
Surrogates	Spiked	QC LI	mits(% Rec.)	•	Percent Recover	L
2-Fluorophenol	2000 ppb	25-12	1 72	71	76	76
Phenol-d5	2000 ppb	24-11	3 54	53	57	57
Nitrobenzene-d5	1000 ppb	23-12	0 79	78	85	86
2-Fluorobiphenyl	1000 ppb	30-11	5 112	106	111	108
2,4,6-Tribromophenol	2000 ppb	19-12	2 60	60	64	63
Terphenyl-d14	1000 ppb	18-13	7 92	91	92	95
Analyses performed b	y: Taman	a David	3			



MOBILE ONE LABORATORIES INC.	
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3

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			MAINX:	Crists:					_						•																									
								EPA 8260B	(-20 to +20%)	2882	yes	yes	yes	yes	yes	yes	yes	2	2	yes	yes	yes	yes	yes	yes	yes	yes	2	763	Yes	yes	yes	yes	yes	yes	yes	yes	yes	708	<b>8</b>
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To the second	rificat	8260B	ã					ပ္ပ	(-20 to +20%)	288			<b>26</b>				<b>8</b>							<b>5</b>								X X				<b>36</b>				
	lon Ve	EPA Method 8260B	(5035 Prep.)							91																														
養養	Calibration Verification	EPA N	<u>ō</u>								7	_	15	<del>-</del>	1	ů.	<b>—</b>	27	လှ	ç		9	'n	€0	-15	<b>9</b> !	7	*	n (	, ,		-	12	ዋ	8	4	17	÷	•	_
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					Continuing Calibration	<b>3000</b>	E		•	Amount Found Percent Difference	51	<b>5</b>	57	20	58	<b>5</b>	20	2	22	<b>\$</b>	53	90	47	<b>5</b>	42	90	20	62	2 9	<b>2</b> (	2	52	8	47	20	48	<b>28</b>	3	\$	2
				Ē	nuing C	26 Sep 2000	8:06 em	-			•,	•	-,	-/	•,	•	-,	_	•	•		•	•	-,	•									•		•		•	•	_
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			SCS Engineers	Lawson Distribution			_	Ļ			romethane	90		90		omethane	thene	loride	ether	nloroethene	thane	ropane	roethene		nethane	oethane	ropene	chloride	eueu		Je	ropane	omethane	ane	ropropene		hloropropene	oethane	thane	ropane
			Client:	Project:	Sample Name:	<b>Analysis Date</b>	Analysis Time	Dilution Factor.		Compound	Dichlorodifluorom	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	1,1-Dichloroethene	Methylene Chloride	Methyl-t-butylether	trans-1,2-Dichloroethene	1,1-Dichloroethane	2,2-Dichloropropane	cis-1,2-Dichloroethene	Chloroform	Bromochlorometh	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride	1,4-Dignioroemane	Benzene	Inchloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	cis-1,3-Dichloropropene	Toluene	trans-1,3-Dichloropropene	1,1,2-Trichloroethane	1,2-Dibromoetha	1,3-Dichloropropane

## **Calibration Verification**

## **EPA Method 8260B**

Client: SCS Engineers
Project: Lawson Distribution

(5035 Prep.)

Matrix: Units:

**EPA 8260B** 

soil

ug/kg

Sample Name:	Continu	uing Calibra	tion		(-20 to +20%)	
Compound			Percent Difference		Pass	
Tetrachloroethene		47	-7		yes	
Dibromochloromethane		50	Ô		yes	
Chlorobenzene		48	-4		yes	
Ethylbenzene	CCC	49	-2	y€		
1,1,1,2-Tetrachloroethan	8	50	-1	•	yes	
m,p-Xylene		95	-5		yes	_
o-Xylene		51	2	,	yes	•
Styrene		52	4		yes	
Bromoform		57	13		yes	
Isopropylbenzene		53	6		yes	•
1,1,2,2-Tetrachloroethan	0	42	-16	•	yes	
1,2,3-Trichloropropane		43	-14		yes	
n-propylbenzene		52	3		yes	
Bromobenzene		45	-9		yes	
1,3,5-Trimethylbenzene		53	7		yes	
2-Chlorotoluene		49	-2		yes	
4-Chlorotoluene		50	1		yes	
tert-Butylbenzene		48	-5		yes	
1,2,4-Trimethylbenzene		53	7		yes	
sec-Butylbenzene		52	4		yes	
p-Isopropyltoluen <b>e</b>		53	6		yes	
1,3-Dichlorobenzene		50	0		yes	
1,4-Dichlorobenzene		50	0		yes	
n-Butylbenzene		58	11		yes	
1,2-Dichlorobenzene		48	-4		yes	
1,2-Dibromo-3-chloropro	pane	44	-13		yes	
1,2,4-Trichlorobenzene		58	11		yes	
Hexachlorobutadiene		55	11		yes	
Naphthalene		43	-15		yes	
1,2,3-Trichlorobenzene		53	6		yes	
Surrogates Spiked	QC Limit			SUMM		
_	80-120	102	CCC compounds	PASS	the 8260B criteria.	CALIBRATION VERIFIED
1,2-DCA-d4 50 ng		113				
Toluene - d8 50 ng	80-120	100				
4 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6						

113

50 ng 65-135

Analysis performed by: Tamara Davis



1,4-BFB



## **QC Summary**

Client

SCS Engineers

Project:

Lawson Distribution

Matrix: soil

Method	TPH gasoline	TPH diesel	TRPH	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
APR - % QC Limits	(67-125)	(67-125)	(75-126)	(60-125)	(60-125)	(59-125)	(52-125)	(60-127)
RPD - % QC Limits	<30	<30	<30	<30	<30	<30	<30	<30
Date Analyzed: 9/26/00								
Spike Level (mg/kg)	151	251						
MS Amount Found	137	276						
MSD Amount Found	138	235						
APR - %	91.1	101.8						
RPD - %	0.7	16.0						
Date Analyzed: 9/27/00								
Spike Level (mg/kg)			82					
LCS Amount Found			85					
LCSD Amount Found			86					
APR-%			104.3					
RPD - %			1.2					

Calibration verification was within acceptable limits.

SCS092600



## QC Summary

Client: Project: SCS Engineers
Lawson Distribution

Matric soil

Method 8260B	1,1-DCE	Benzene	TCE	Toluene	CI-Benz
Recovery % QC Limits	(53-112)	(77-134)	(78-143)	(75-141)	(95-151)
RPD - % QC Limits	<30	<30	<30	<30	<30
Date Analyzed: 9/26/00					
Spike Level (ug/kg)	50.0	50.0	50.0	50.0	50.0
Sample Amount	0.0	0.0	0.0	0.0	0.0
LCS Amount Found	52.7	48.1	50.6	48.4	47.9
LCSD Amount Found	51.4	48.0	53.3	48.4	49.6
LCS Recovery	105.3	96.1	101.3	96.8	95.8
LCSD Recovery	102.7	95.9	106.5	96.7	99.1
RPO %	2.5	0.2	5.1	0.1	3.4

Calibration verification was within acceptable limits.

SCS092600

Pyrene

1,000

## Report Summary

#### EPA Method 8270C (35508 or 3510C Prep.)

8C8 Engineers Matrix: Client: Boll Lawson Distribution Project: Units: ug/kg BLANK LCS LCSD Sample Name: Analysis Date 26 Sept 2000 26 Sept 2000 26 Sept 2000 Analysis Time 11:59am 2:40pm 2:09pm 600 P Dilution Factor: Spiked Average QC Limits: Compound Amount Found Found % Recovery Limits % Difference Found 2,000 58 Phenol 36-90 <307 0 1153 1177 2 2-Chlorophenol 2.000 0 1401 1407 70 25-102 0 <38 <30<sup>7</sup> 1,4-Dichlorobenzene 1,000 0 941 95 961 28-104 0 n-Nitroso-di-n-propylamine 1,000 584 495 54 41-128 -18 1,2,4-Trichlorobenzene 1,000 98 <30 956 955 38-107 0 4-Chloro-3-methylphenol 2,000 1458 1446 73 <30 26-103 -1 Acenaphthene 1,000 31-137 <30 1096 1081 109 -1 4-Nitrophenol 2,000 466 381 21 11-114 -20 <30 1,000 2.4-Dinitrotoluene 549 460 50 28-89 < 30 -18 Pentachiorophenol 2,000 0 1007 860 47 17-109 -16 <30

1189

115

35-142

8

< 30

1101



## **Footnote Summary**

Footnote	<u>Definition</u>
E.Q.L.	Estimated Quantitation Limit
nd	Not detected above the E.Q.L.
В	Analyte found in the associated blank.
Ē	Analyte amount exceeds calibration range. Amount quantitated by extrapolation.
**	Surrogate recovery outside QC range; no corrective action taken.
M	Surrogate recovery outside QC range due to matrix interference.

SCS092600

# MODILE ONE LABORATORIES INC

## CHAIN-OF-CUSTODY RECORD

MOL: Scroprice

Date: 9/26/00 Page / of 1 148 So. Vinewood Street, Escondido, CA 92029-1921 (760) 735-3208 FAX (760) 735-2469 Analysis Requested Chent: SCS Turnaround Requested: Site Address 12500 E. Slauson S Onsite/24-48 hrs Pringle Text sort support Santa Fr Springe Offite Syla racing shape Other\_ Lausen Dist. Project: Sampler (signature): \_\_\_ Sample ID Date Time Location 9/26/10) ap11 \* 1150 1155 SP2 -X EXB-15 SCIONT 8015 T E 1240 S & analyze Do not 5 ELB-IN -1245 Elemin -9 BOX) EXB - 2019 9 EXSU-IN 4 Q EXSW-IE EXSIN-19 S EKSW-IWB H50 SP3 -1525 504 V 1292 Date: Date: Date: Sample Receipt Special Instructions 7.2.00 Intact: Signature: Signature: Yes No Printed Name DARREN P. NOS Time: Time: Printed Name: Time: Printed Name: Company SCS EMLINERS Seal Intact: 1620 Company: Company: Yes No N/A Date: Date: Date: Cold: 912610c Kimual nus Signature \* Signature: Signature: Yes No Time: Time: Printed Name Tomora Dava Printed Name: Printed Name: N/A (Received on site) 420 Company. Company: Company: "Signature constitutes authorization to proceed with analysis and acceptance of conditions on back."